Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-39 (Cancelled)

- 40. (Previously presented) The method according to claim 47, wherein said receptor tyrosine kinase is epidermal growth factor receptor (EGFR).
- 41. (Previously presented) The method according to claim 47, wherein said growth factor precursor is proheparin-epidermal growth factor (proHB-EGF) and said receptor tyrosine kinase is EGFR.
- 42. (Previously presented) The method according to claim 47, wherein said receptor tyrosine kinase is selected from the group consisting of epidermal growth factor receptor (EGFR), human epidermal growth factor receptor-2 (HER-2), human epidermal growth factor receptor-3 (HER-3), human epidermal growth factor receptor-4 (HER-4), Tumor Necrosis Factor receptor 1 (TNF receptor 1), Tumor Necrosis Factor receptor 2 (TNF receptor 2), tumor necrosis factor receptor superfamily, member 8 (CD 30) and interleukin 6 receptor (IL-6 receptor).
- 43. (Previously presented) The method according to claim 47, wherein said receptor tyrosine kinase is selected from the group consisting of EGFR and other members of the EGFR family.

- 44. (Currently amended) A method for identifying a test compound for modulating G-protein mediated signal transduction, comprising contacting a <u>cancer_cell</u> containing a receptor tyrosine kinase capable of activation by G-protein mediated signal transduction with a test compound suspected to act on a precursor of a ligand of the receptor tyrosine kinase, and evaluating G-protein mediated receptor tyrosine kinase activation upon exposure of the <u>cancer_cell</u> to said test compound as an indication of said test compound's ability to modulate G-protein mediated signal transduction thereby identifying a test compound for modulating G-protein mediated signal transduction, wherein said cancer cell is selected from the group consisting of <u>pancreatic</u>, prostate, gastric, breast, thyroid, pituitary, adrenal and ovarian tumor cells.
- 45. (Currently amended) A method for modulating growth factor receptor activation by modulating a G-protein mediated signal transduction, comprising:

stimulating G protein mediated signal transduction in a <u>cancer_cell having a</u> growth factor_receptor tyrosine kinase, wherein the growth factor_receptor tyrosine kinase is activated, and wherein said growth factor_receptor tyrosine kinase is selected from the group consisting of EGFR and other members of the EGFR family, said <u>cancer_cell</u> comprising an extracellular EGFR domain and having a G-protein mediated signal transduction pathway <u>which activates a growth factor receptor</u>, wherein one or more tyrosine residues are phosphorylated based on the activation of said G-protein mediated signal transduction pathway, the extracellular domain of

said receptor is capable of binding to its receptor ligand, and said ligand is generated from a precursor of said ligand by a proteinase-dependent cleavage; and

contacting said <u>cancer</u> cell with a compound which acts on a growth factor precursor in a G protein mediated extracellular signal pathway <u>which activates a growth factor receptor</u>, and thereby modulating the <u>growth factor receptor</u> tyrosine kinase activation by G-protein mediated signal transduction, <u>wherein said cancer cell is selected from the group consisting of pancreatic, prostate, gastric, breast, thyroid, pituitary, adrenal and ovarian tumor cells.</u>

46. (Canceled)

47. (Currently amended) A method for modulating growth factor receptor activation by modulating G-protein mediated signal transduction comprising:

stimulating G protein mediated signal transduction in a cell having a growth factor receptor tyrosine kinase, wherein the growth factor receptor tyrosine kinase is activated; and

contacting the cell with a compound which directly binds to a growth factor precursor in a G protein mediated extracellular signal transduction pathway which activates a growth factor receptor, wherein said G protein mediated extracellular signal transduction pathway includes cleavage of a growth factor precursor, thereby modulating the growth factor receptor tyrosine kinase activation by G-protein-mediated signal transduction.

U.S. Serial Number 09/461,090 Office Action Dated January 4, 2007 Page 5

48. (Previously presented) The method according to claim 47, wherein said cell is an ovarian cancer cell or a prostate cancer cell.